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is referenced but not set forth in full-text in this part and which is identified in paragraph (c) of this section is hereby incorporated by reference and made a part of Part 36 of this chapter with the approval of the Director of the FEDERAL REGISTER.

- (2) Incorporated matter which is subject to subsequent change is incorporated by reference according to the specific reference and to the identification statement. Adoption of any subsequent change in incorporated matter is made under Part 11 of this chapter and 1 CFR Part 51.
- (c) Identification statement. The complete title or description which identifies each published matter incorporated by reference in this part is as follows:
- (1) International Electrotechnical Commission (IEC) Publications. (i) IEC Publication No. 179, entitled "Precision Sound Level Meters," dated 1973.
- (ii) IEC Publication No. 225, entitled "Octave, Half-Octave, Third Octave Band Filters Intended for the Analysis of Sounds and Vibrations," dated 1966.
- (iii) IEC Publication No. 651, entitled "Sound Level Meters," first edition, dated 1979.
- (iv) IEC Publication No. 561, entitled "Electro-acoustical Measuring Equipment for Aircraft Noise Certification," first edition, dated 1976.
- (v) IEC Publication No. 804, entitled "Integrating-averaging Sound Level Meters," first edition, dated 1985.
- (2) Society of Automotive Engineers (SAE) Publications. (i) SAE ARP 866A, entitled "Standard Values at Atmospheric Absorption as a Function of Temperature and Humidity for Use in Evaluating Aircraft Flyover Noise," dated March 15, 1975.
- (d) Availability for purchase. Published material incorporated by reference in this part may be purchased at the price established by the publisher or distributor at the following mailing addresses:
- (1) IEC publications. (i) The Bureau Central de la Commission Electrotechnique, Internationale, 1, rue de Varembe, Geneva, Switzerland.
- (ii) American National Standard Institute, 1430 Broadway, New York City, New York 10018.

- (2) SAE publications. Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrentown, Pennsylvania 15096.
- (e) Availability for inspection. A copy of each publication incorporated by reference in this part is available for public inspection at the following locations:
- (1) FAA Office of the Chief Counsel, Rules Docket, Room 916, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, DC.
- (2) Department of Transportation, Branch Library, Room 930, Federal Aviation Administration Headquarters Building, 800 Independence Avenue, SW., Washington, DC.
- (3) The respective Region Headquarters of the Federal Aviation Administration as follows:
- (i) New England Region Headquarters, 12 New England Executive Park, Burlington, Massachusetts 01803.
- (ii) Eastern Region Headquarters, Federal Building, John F. Kennedy (JFK) International Airport, Jamaica, New York 11430.
- (iii) Southern Region Headquarters, 3400 Norman Berry Drive, East Point, Georgia 30344
- (iv) Great Lakes Region Headquarters, O'Hare Lake Office Center, 2300 East Devon Avenue, Des Plaines, Illinois 60018.
- (v) Central Region Headquarters, Federal Building, 601 East 12th Street, Kanasa City Missouri 64106.
- (vi) Southwest Region Headquarters, 4400 Blue Mound Road, Fort Worth, Texas 76193-0000.
- (vii) Northwest Mountain Region Headquarters, 17900 Pacific Highway South, Seattle, Washington 98168.
- (viii) Western-Pacific Region Headquarters, 15000 Aviation Boulevard, Hawthorne, California 92007.
- $\left(\text{ix}\right)$ Alaskan Region Headquarters, 701 C Street, Anchorage, Alaska 99513.
- (x) European Office Headquarters, 15, Rue de la Loi (3rd Floor), B-1040 Brussels, Belgium.

[Amdt. 36-9, 43 FR 8739, Mar. 3, 1978, as amended by Amdt. 36-16, 53 FR 47400, Nov. 22, 1988; Amdt. 36-20, 57 FR 42854, Sept. 16, 1992]

§ 36.7 Acoustical change: Transport category large airplanes and turbojet powered airplanes.

(a) Applicability. This section applies to all transport category large airplanes and turbojet powered airplanes for which an acoustical change approval is applied for under §21.93(b) of this chapter.

- (b) General requirements. Except as otherwise specifically provided, for each airplane covered by this section, the acoustical change approval requirements are as follows:
- (1) In showing compliance, noise levels must be measured and evaluated in accordance with the applicable procedures and conditions prescribed in Appendices A and B of this part.
- (2) Compliance with the noise limits prescribed in section C36.5 of appendix C must be shown in accordance with the applicable provisions of sections C36.7 and C36.9 of appendix C of this part.
- (c) Stage 1 airplanes. For each Stage 1 airplane prior to the change in type design, in addition to the provisions of paragraph (b) of this section, the following apply:
- (1) If an airplane is a Stage 1 airplane prior to the change in type design, it may not, after the change in type design, exceed the noise levels created prior to the change in type design. The tradeoff provisions of section C36.5(b) of appendix C of this part may not be used to increase the Stage 1 noise levels, unless the aircraft qualifies as a Stage 2 airplane.
- (2) In addition, for an airplane for which application is made after September 17, 1971—
- (i) There may be no reduction in power or thrust below the highest airworthiness approved power or thrust, during the tests conducted before and after the change in type design; and
- (ii) During the takeoff and sideline noise tests conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.
- (d) Stage 2 airplanes. If an airplane is a Stage 2 airplane prior to the change in type design, the following apply, in addition to the provisions of paragraph (b) of this section:
- (1) Airplanes with high bypass ratio turbojet engines. For an airplane that has turbojet engines with a bypass ratio of 2 or more before a change in type design—
- (i) The airplane, after the change in type design, may not exceed either (A)

- each Stage 3 noise limit by more than 3 EPNdB, or (B) each Stage 2 noise limit, whichever is lower:
- (ii) The tradeoff provisions of section C36.5(b) of appendix C of this part may be used in determining compliance under this paragraph with respect to the Stage 2 noise limit or to the Stage 3 plus 3 EPNdB noise limits, as applicable; and
- (iii) During the takeoff and sideline noise test conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.
- (2) Airplanes that do not have high bypass ratio turbojet engines. For an airplane that does not have turbojet engines with a bypass ratio of 2 or more before a change in type design—
- (i) The airplane may not be a Stage 1 airplane after the change in type design; and
- (ii) During the takeoff and sideline noise tests conducted before the change in type design, the quietest airworthiness approved configuration available for the highest approved takeoff weight must be used.
- (e) Stage 3 airplanes. If an airplane is a Stage 3 airplane prior to the change in type design, the following apply, in addition to the provisions of paragraph (b) of this section:
- (1) If compliance with Stage 3 noise levels is not required before the change in type design, the airplane must—
- (i) Be a Stage 2 airplane after the change in type design and compliance must be shown under the provisions of paragraph (d)(1) or (d)(2) of this section, as appropriate; or
- (ii) Remain a Stage 3 airplane after the change in type design. Compliance must be shown under the provisions of paragraph (e)(2) of this section.
- (2) If compliance with Stage 3 noise levels is required before the change in type design, the airplane must be a Stage 3 airplane after the change in type design.
- (3) Applications on or after [August 14, 1989.] The airplane must remain a

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Stage 3 airplane after the change in type design.

[Amdt. 36–7, 42 FR 12371, Mar. 3, 1977; Amdt. 36–8, 43 FR 8730, Mar. 2, 1978; Amdt. 36–10, 43 FR 28420, June 29, 1978; Amdt. 36–12, 46 FR 33464, June 29, 1981; Amdt. 36–15, 53 FR 16366, May 6, 1988; 53 FR 18950, May 25, 1988; Amdt. 36–17, 54 FR 21042, May 15, 1989

§ 36.9 Acoustical change: Propellerdriven small airplanes and propeller-driven commuter category airplanes.

For propeller-driven small airplanes in the primary, normal, utility, acrobatic, transport, and restricted categories and for propeller-driven, commuter category airplanes for which an acoustical change approval is applied for under §21.93(b) of this chapter after January 1, 1975, the following apply:

- (a) If the airplane was type certificated under this part prior to a change in type design, it may not subsequently exceed the noise limits specified in §36.501 of this part.
- (b) If the airplane was not type certificated under this part prior to a change in type design, it may not exceed the higher of the two following values:
- (1) The noise limit specified in §36.501 of this part, or
- (2) The noise level created prior to the change in type design, measured and corrected as prescribed in §36.501 of this part.

[Amdt. 36–16, 53 FR 47400, Nov. 22, 1988; 53 FR 50157, Dec. 13, 1988; Amdt. 36–19, 57 FR 41369, Sept. 9, 1992]

§ 36.11 Acoustical change: Helicopters.

This section applies to all helicopters in the primary, normal, transport, and restricted categories for which an acoustical change approval is applied for under §21.93(b) of this chapter on or after March 6, 1986. Compliance with the requirements of this section must be demonstrated under appendix H of this part, or, for helicopters having a maximum certificated takeoff weight of not more than 6,000 pounds, compliance with this section may be demonstrated under appendix J of this part.

(a) General requirements. Except as otherwise provided, for helicopters covered by this section, the acoustical

change approval requirements are as follows:

- (1) In showing compliance with the requirements of appendix H of this part, noise levels must be measured, evaluated, and calculated in accordance with the applicable procedures and conditions prescribed in parts B and C of appendix H of this part. For helicopters having a maximum certificated takeoff weight of not more than 6,000 pounds that alternatively demonstrate compliance under appendix J of this part, the flyover noise level prescribed in appendix J of this part must be measured, evaluated, and calculated in accordance with the applicable procedures and conditions prescribed in parts B and C of appendix J of this
- (2) Compliance with the noise limits prescribed in section H36.305 of appendix H of this part must be shown in accordance with the applicable provisions of part D of appendix H of this part. For those helicopters that demonstrate compliance with the requirements of appendix J of this part, compliance with the noise levels prescribed in section J36.305 of appendix J of this part must be shown in accordance with the applicable provisions of part D of appendix J of this part.
- (b) Stage 1 helicopters. Except as provided in §36.805(c), for each Stage 1 helicopter prior to a change in type design, the helicopter noise levels may not, after a change in type design, exceed the noise levels specified in section H36.305(a)(1) of appendix H of this part where the demonstration of compliance is under appendix H of this part. The tradeoff provisions under section H36.305(b) of appendix H of this part may not be used to increase any Stage 1 noise level beyond these limits. If an applicant chooses to demonstrate compliance under appendix J of this part, for each Stage 1 helicopter prior to a change in type design, the helicopter noise levels may not, after a change in type design, exceed the Stage 2 noise levels specified in section J36.305(a) of appendix J of this part.
- (c) Stage 2 helicopters. For each helicopter that is Stage 2 prior to a change in type design, the helicopter must be